SPACE SCIENCE REVIEWS

LIBRARY USE ONLY

UNIVERSITY OF HAWAIL



SPACE SCIENCE REVIEWS

Volume 9 (1969)



D. REIDEL PUBLISHING COMPANY

DORDRECHT-HOLLAND

© 1969. D. Reidel Publishing Company, Dordrecht, Holland No part of this book may be reproduced in any form, by print, photoprint, microfilm, or any other means, without written permission from the publisher

Printed in The Netherlands by D. Reidel, Dordrecht

Editor-in-chief

C. DE JAGER, Universities of Utrecht and Brussels

Editorial Board:

S.-I. AKASOFU, University of Alaska, College, Alaska, U.S.A.
W.J.G. BEYNON, University College of Wales, Aberystwyth, Wales
J.-E. BLAMONT, Service d'Aéronomie, Verrières, France
R.L.F. BOYD, University College, London, England
L. BROGLIO, Scuola d'ingegneria aeronautica, Rome, Italy
M. CALVIN, University of California, Berkeley, Calif., U.S.A.
S. CHAPMAN, University of Alaska, College, Alaska, U.S.A.
R.R. DANIEL, Tata Institute of Fundamental Research, Bombay, India
H. FRIEDMAN, Naval Research Laboratory, Washington, D.C., U.S.A.
L. GOLDBERG, Harvard College Observatory, Cambridge, Mass., U.S.A.
V. N. HESS, N.A.S.A., Manned Spacecraft Center, Houston, Texas, U.S.A.

W. N. Hess, N.A.S.A., Manned Spacecraft Center, Houston, Texas, U.S.A. A.R.Hibbs, Jet Propulsion Laboratory, California Institute of Technology, Pasadena, Calif., U.S.A.

H. C. VAN DE HULST, University of Leyden, Leyden, The Netherlands G. H. Ludwig, NASA, Goddard Space Flight Center, Greenbelt, Md., U.S.A.

R. LÜST, Institut für Extraterrestrische Physik, Garching-München, Germany G.J.F. MACDONALD, University of California, Los Angeles, Calif., U.S.A. G. MAMIKUNIAN, Biometrics Institute, Tucson, Ariz., U.S.A.

D.F. MARTYN, Commonwealth Scientific and Industrial Research Organization,
Camden, N.S.W., Australia

H.S.W. MASSEY, University College, London, England
B.M. McCormac, Lockheed Palo Alto Research Laboratory, Palo Alto, Calif., U.S.A.
A.P. Mitra, National Physical Laboratory, New Delhi, India

J.E. NAUGLE, Geophysics and Astronomy Programs Office of Space Sciences, Washington, D. C., U.S.A.

H.E. NEWELL, NASA, Washington, D. C., U.S.A.

M. NICOLET, Bureau du Centre National de Recherches de l'Espace, Brussels, Belgium T. Obayashi, University of Tokyo, Tokyo, Japan

B.J. O'BRIEN, Rice University, Houston, Tex., U.S.A.

B. Peters, Technical University of Denmark, Lyngby, Denmark
Sir R. Peters, Cambridge, England

M.A. POMERANTZ, Franklin Institute, Swarthmore, Pa., U.S.A.
R.W. PORTER, Engineering Services, General Electric Company, New York, U.S.A.
E. RECHTIN, The Pentagon, Washington, D.C.

J.G. ROEDERER, University of Denver, Denver, Colo., U.S.A.

B. Rossi, Massachusetts Institute of Technology, Cambridge, Mass., U.S.A. L. I. Sedov, Academy of Sciences of the U.S.S.R.

J.A. VAN ALLEN, The University of Iowa, Iowa City, Iowa, U.S.A. F. L. Whipple, Smithsonian Astrophysical Observatory, Cambridge, Mass., U.S.A.

J.R. WINCKLER, University of Minnesota, Minneapolis, Minn., U.S.A.

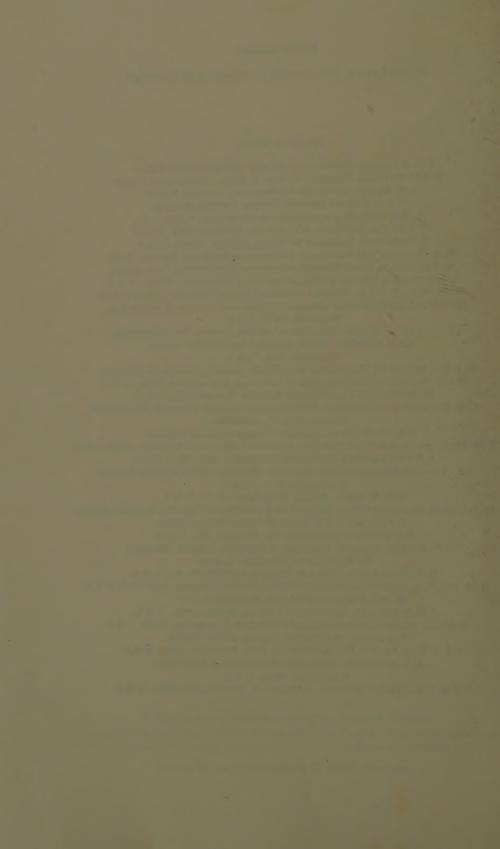


TABLE OF CONTENTS

COATES, ROBERT J. / Tracking and Data Acquisition for Space Exploration	361
Freden, Stanley C. / Inner-Belt Van Allen Radiation	198
GIACCONI, R., W. P. REIDY, G. S. VAIANA, L. P. VAN SPEYBROECK and T. F.	
ZEHNPFENNIG / Grazing-Incidence Telescopes for X-Ray Astronomy	3
GUREVICH, A. V., L. P. PITAEVSKII and V. V. SMIRNOVA / Ionospheric Aero-	
dynamics	805
AFFE, LEONARD D. / Recent Observations of the Moon by Spacecraft	491
OHNSON, FRANCIS S. / Origin of Planetary Atmospheres	303
KUPERUS, M. / The Heating of the Solar Corona	713
LAL, D. / Recent Advances in the Study of Fossil Tracks in Meteorites due to	
Heavy Nuclei of the Cosmic Radiation	623
LIU, V. C. / Ionospheric Gas Dynamics of Satellites and Diagnostic Probes	423
MÖLLER, F. and E. RASCHKE / Problems of Meteorological Observations from	
Satellites	90
OGUTI, TAKASI / Conjugate Point Problems	745
PARKER, E. N. / Theoretical Studies of the Solar Wind Phenomenon	325
PARKER, E. N. / Galactic Effects of the Cosmic-Ray Gas	651
PITAEVSKII, L. P., see Gurevich, A. V.	
POLLACK, JAMES B. and CARL SAGAN / An Analysis of Martian Photometry and	
Polarimetry	243
PRICE, ALBERT T. / Daily Variations of the Geomagnetic Field	151
RASCHKE, E., see Möller, F.	
Reidy, W. P., see Giacconi, R.	
ROSEN, JAMES M. / Stratospheric Dust and its Relationship to the Meteoric	
Influx	58
SAGAN, CARL, see Pollack, James B.	
SMIRNOVA, V. V., see Gurevich, A. V.	
Speybroeck, L. P. van, see Giacconi, R.	
VAIANA, G. S., see Giacconi, R.	
Zehnpfennig, T. F., see Giacconi, R.	
Elimitemic, 1.11, det Giavoon, 11	
Book Reviews 300, 419, 617, 740	, 872
DOOK INCVIEWS	

